

## ISOMORPHISM METHOD AND APPARATUS

## ABSTRACT OF DISCLOSURE

Disclosed is an algorithm and a computation system that,  
5 when using the stated simplification approach, can heuristically  
or iteratively determine identicalness of two electric circuits  
by setting a minimum network scope value and: FIRST, generating  
signatures defining interconnected circuit components of the set  
scope value and having a prime vertex; SECOND, determining which  
10 of those signatures are unique to a source circuit; THIRD,  
eliminating from further consideration unique signature vertices  
that match with a signature in the target circuit; and FOURTH,  
moving to an identicalness discrepancy list those unique  
signature vertices that do not match. Then, repeating the  
15 process with incremented scope values until only symmetrical and  
unevaluated vertices remain to be matched or added to the  
discrepancy list.